



Amendments To The Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-8 (Cancelled)

9. (Currently Amended) Device for measuring brain parameters

- having a sensor unit (1-3) that is designed in such a way that it

- is adapted to be implanted distally minimally invasively in the parenchyma and/or in the ventricles,

- is received proximally in a fastening element (7) that is arranged centered on a base plate (6), wherein

- the sensor unit (1-3) is connected electrically conducting to an electronics unit (11) spaced apart from the sensor unit by means of a micro plug (10),

- the measuring device comprises a proximal assembly comprising:

- the fastening element (7),

- the sections of the sensor unit (1-3) received in the fastening element (7),

- the electronics unit (11),
- the micro plug (10),
- wherein the proximal assembly (1-3, 7, 10, 11) is implemented such that it is connected solidly and tightly but removably by means of a semi-flexible cover (12) and adapted to be positioned between the skull bone and scalp,
- wherein the cover ~~is adapted to~~ fully ~~enclose~~encloses the proximal assembly to the outside.

10. (Previously Presented) A device according to claim 9, wherein it is subdivided into modules.

11. (Previously Presented) A device according to claim 9, wherein the electronics unit (11) comprises as main components a power supply, a transmitter, a receiver, a control unit and a micro-plug socket.

12. (Previously Presented) A device according to claim 9, wherein the sensor unit (1-3) comprises a catheter (1) of polymeric material and at least one sensor (2, 3) for measuring one of the group of brain pressure, temperature, CO₂ partial pressure, oxygen partial pressure.

13. (Previously Presented) A device according to claim 12, wherein the catheter (1) contains at least one lumen for sensor components, optionally additionally at least one lumen for the drainage of fluid.

14. (Previously Presented) A device according to claim 12, wherein the catheter (1) has a lumen for fluid drainage, said catheter (1) being connected by means of a connection piece of the base plate to an additional catheter adapted to be positioned in the patient's abdominal cavity and together with the additional catheter forms a closed system.

15. (Previously Presented) A device according to claim 9, wherein the electronics unit (11) is sterilizable and reusable.

Claim 16. (Canceled)

17. (Currently Amended) Device for measuring brain parameters

- having a sensor unit (1-3) that is designed in such a way that it

- is adapted to be implanted distally minimally invasively in the parenchyma and/or in the ventricles,

- is received proximally in a fastening element (7) that is arranged centered on a base plate (6),

wherein

- the sensor unit (1-3) is connected electrically conducting to an electronics unit (11) spaced apart from the sensor unit by means of a micro plug (10),

- the measuring device comprises a proximal assembly comprising:

- the fastening element (7),
- the sections of the sensor unit (1-3) received in the fastening element (7),

- the electronics unit (11),
- the micro plug (10),

wherein the proximal assembly (1-3, 7, 10, 11) is implemented such that it is connected solidly and tightly but removably by means of a semi-flexible cover (12) and adapted to be positioned between the skull bone and scalp,

wherein the cover ~~being adapted to fully enclose~~ encloses the proximal assembly to the outside,

wherein the sensor unit (1-3) comprises a catheter (1) of polymeric material and at least one sensor (2, 3) for measuring one of the group of brain pressure, temperature, CO₂ partial pressure, oxygen partial pressure, and

wherein the catheter (1) contains at least one lumen for sensor components and additionally at least one lumen for the drainage of fluid.

Claim 18. (Canceled)